

## ETYMOLOGY OF PSYCHOTRIA IN VIEW OF A NEW USE OF THE GENUS

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During ethnobotanical research among the Kofán Indians of eastern Ecuador, *Psychotria viridis* R. & P. was observed and for the first time, identified as an admixture in the preparation of their hallucinogenic beverage known as *yáje* (6, 7, 8). In the Kofán language, this plant is known as *opríto*, which, interestingly enough, is the name given to the human-like images which these Indians call "the heavenly people" and which they see while under the effect of the narcotic drink. They say that ". . . in order to increase their visions and to make them of longer duration . . ." the leaves and young shoots of the plant are added (1).

*Psychotria viridis* is a glabrous shrub or small tree growing usually in low land which may be flooded part of the year or quite frequently a short distance from streams or small rivers in the primary forest. The plant is characterized by ". . . stipules large, acuminate, thin, brown, caducous; leaves short-petiolate, obovate or obovate-oblong, acute or short-acuminate at the apex, cuneately attenuate to the base; inflorescence terminal, pedunculate, spicate-paniculate, the lower branches verticillate, the minute flowers sessile in distant glomerules; corolla greenish white; fruit red." (10) The plant has a wide distribution from Central America south to Bolivia.

Because this is the first report of the use of a member of the Rubiaceae as an hallucinogen, I became interested in the etymology of the generic name. One could easily believe that *Psychotria* is derived from the Greek ψυχή (*psyche*), meaning mind, soul, or breath, but I do not feel this is the case. Linnaeus (4) derived *Psychotria* from Patrick Browne's name *Psychotrophum* (2). Linnaeus took *Psycho-* from *Psychotrophum* and added the nominative ending *tria*. Unfortunately, neither Linnaeus nor Browne state their reason for deriving these names. The following

interpretation, which I believe to be wrong, became the accepted dictionary explanation of the origin of *Psychotria*. Wittstein (11) states, "*Psychotria* L. (Rubiaceae) Zus. aus ψυχη (Seele, Leben) und τροφειν (ernärhen, erhalten); aus den Samen den Ps. herbacea bereitet man nach P. Browne auf Jamaica ein angenehmes coffeeähnliches Getrank. Linné zog den ursprünglich von Browne gebildeten Namen Psychotrophum zusammen." Furthermore, in agreement with Wittstein, J. K. Small (9) states: "The generic name *Psychotria* is derived from a combination of two Greek words signifying soul-nourishment; the seeds of some species are used in the tropics as a substitute for coffee, hence the name wild coffee." But upon careful study of Browne's statement, "The seeds of all the species are pretty much like those of coffee," I surmised that he was not at all referring to a use of the seed but was rather describing and morphologically comparing the seed (2). After describing his "genera," Browne would often present a brief botanical summary giving an inclusive description of the group. This is what he did in the case of *Psychotria* which was later misinterpreted by Small, Wittstein, and perhaps, even by Linnaeus since the meaning of Browne's word is not fully expressed in the name Linnaeus coined. Before coming to this conclusion, I searched several early sources to see if any similar uses of *Psychotria* had been recorded, but I found none. Moreover, both Dr. Dennis Adams of the University of The West Indies and Mr. George R. Proctor of The Institute of Jamaica, through correspondence, reported that they had no records of *Psychotria* being used as a drink or a substitute for coffee in Jamaica. Equally significant, Patrick Browne did not mention a use for this genus as he did with others when a use was known to him.

What is probably the real etymology of *Psychotria* was discovered when I encountered the following statement concerning *Psychotria* in *Hortus Jamaicensis* by John Lunan: "This was so named from the Greek of an herb in Dioscorides, so called from its delighting to grow in cool situations." (5). This name was then found in Book iv. i. of

Dioscorides (3) under the name Kestron. He states, "Kestron that which is called Psychotrophon because it is found in the coldest places, which ye heighth of a cubit, or more, 4 cornered, ye leaves long, soft, like ye oak jagged round about, smelling well, but they are greater towards ye root, & on the top of ye stalks lies ye seed encased in an ear as of Thymbra." Although this plant has been identified as *Betonica Alopecurus*, this is the first use of Psychotrophon from which Browne made *Psychotrophum* and later Linnaeus coined *Psychotria*.

Hence, *Psychotria* is derived from the Greek word ψύχω (psycho) meaning to breathe, to blow, to chill and the word τροσφος (trophos) meaning growing in, an adjectival form of the verb τροφειν (trephein) meaning to grow, to nourish. Browne coined the word *Psychotrophum* which means growing in a cool situation, probably because the species known to him were "... all natives of the woods, and grow best in a rich shady soil." (2). Although the etymology of *Psychotria* does not turn out to be what one would expect, this does not, of course, detract from the significant role this species has in the hallucinogenic beverage of the Kofán Indians and other aboriginal groups of the Amazon (figs. 1 & 2).

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Fig. 1. Kofán Shaman administering the hallucinogenic drink yáje prepared from *Psychotria viridis* and species of *Banisteriopsis*.

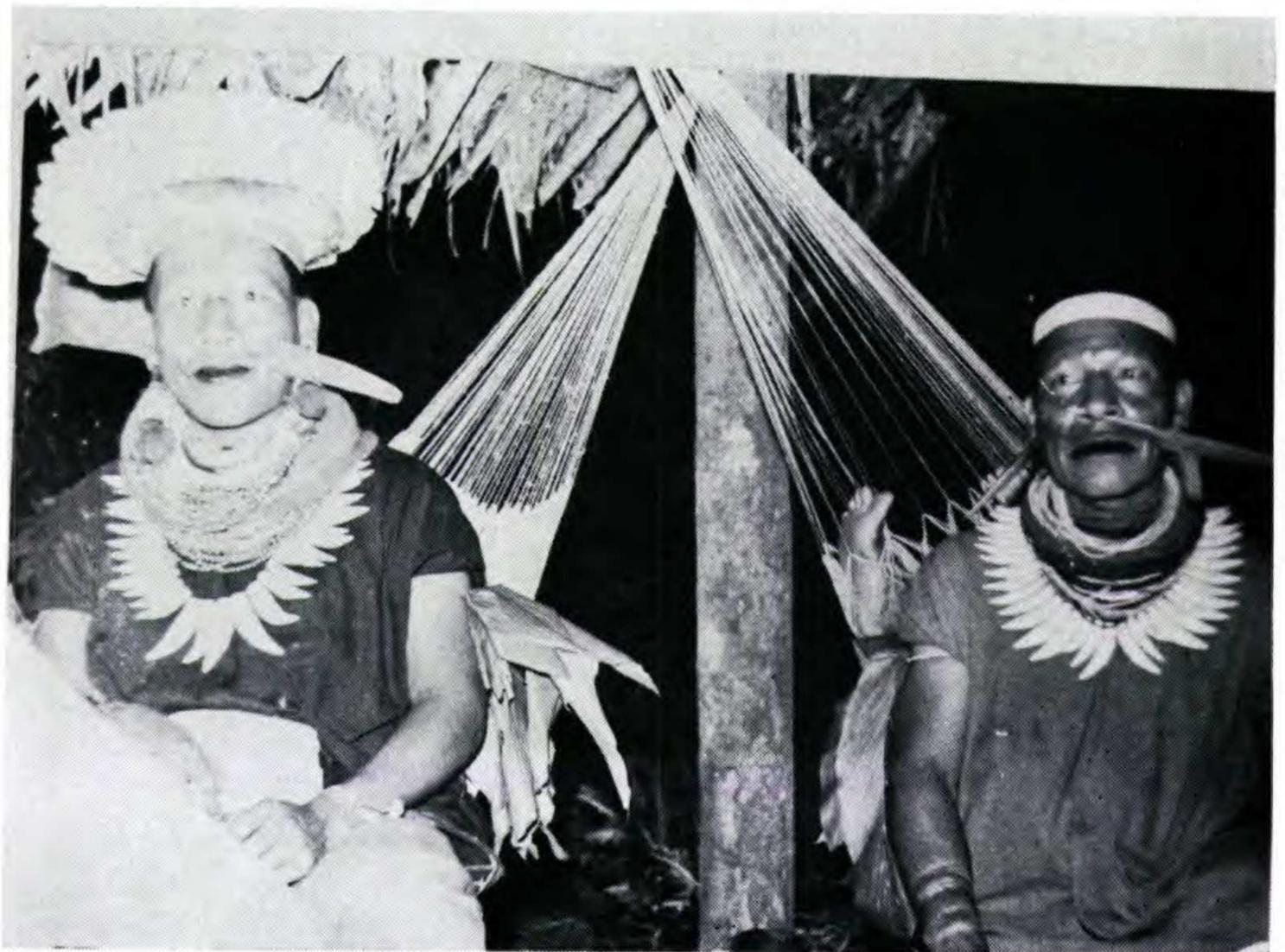


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Fig. 2. Kofán Indians preparing to drink the hallucinogenic concoction during an all night yáje ceremony.

I express thanks to those whose names I did not include, especially those of the Gray Herbarium of Harvard University. Dr. Ara Der Marderosian and Dr. Kenneth M. Kensinger have permitted me to publish the following personal communication about their recent findings for which I wish to express my thanks.

*Current investigation by Dr. Ara Der Marderosian of the Philadelphia College of Pharmacy and Science has apparently shown the presence of Dimethyltryptamine, a known hallucinogenic chemical compound, in plant material collected by the anthropologist Kenneth M. Kensinger of Temple University while carrying out field work among the Cashinahua Indians of Peru. This material was identified as Psychotria, possibly P. viridis by Homer V. Pinkley, and voucher specimens are now preserved in the Economic Herbarium of Oakes Ames in the Botanical Museum of Harvard University.*

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### GLAUCIUM FLAVUM CRANTZ FROM CAPE COD

In the summer of 1968, we discovered a single plant of *Glaucium flavum* in West Falmouth, Massachusetts (Barnstable County). The plant was growing in sand two-three feet above the high tide level near the West Falmouth Jetty. We returned to this area in August, 1969 and observed three separate colonies of *Glaucium* (20 plants in all), growing with the two dominant components of the beach flora, *Ammophila breviligulata* and *Artemisia Stelleriana*. Most of the plants bore at least one fruiting capsule.

The West Falmouth station is a slight range extension for *Glaucium*. It previously had been reported from Bristol County and Dukes County (the Elizabeth Islands), Massachusetts, and from Bristol, Newport and Prudence Island, Rhode Island (Seymour, 1969. *Flora of New England*). We were able to find one other New England record in the New England Botanical Club Herbarium, from Gay Head, Martha's Vineyard, Massachusetts (Dukes County).

Voucher specimens were collected and deposited in the University of New Hampshire, New England Botanical Club and Southampton College Herbaria.

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